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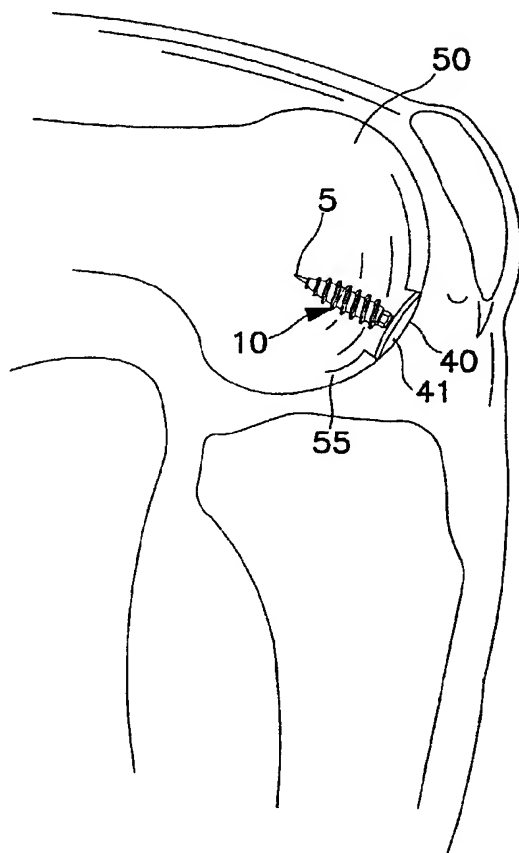
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(54) Title: SYSTEM AND METHOD FOR JOINT RESURFACE REPAIR



(57) Abstract: The present invention provides tools and methods for mapping and measuring the articular surface of a joint (or of any bony surface) and for fabricating a prosthetic device based on this recorded data. In one embodiment, once the defect of the chondral surface has been identified, a guide pin (20) is inserted arthroscopically. A fixation screw (10) is driven into the subchondral bone in relation to a reference axis that is approximately central to the defect, the fixation device also serving to define a tangent point to the surrounding articular surface. A measuring tool (70) having a static post that establishes the axial location of origin is inserted on the reference axis. Data recorded during the mapping procedure is entered into parametric engineering design software of similar algorithm to define a three dimensional surface matched to the bearing surface geometry to be implanted and reproduce the anatomic contours mapped.



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## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US01/14061

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : A61B 17/00; A61F 2/46

US CL : 606/102; 623/18.11, 20.14, 20.31, 23.35

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 606/102; 623/18.11, 20.14, 20.31, 23.35, 20.31, 20.28, 20.29, 20.33

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,964,808 A (BLAHA et al) 12 October 1999, whole document.	1-10
Y	US 5,888,210 A (Draenert) 30 March 1999, whole document.	1-10
Y	US 5,771,310 A (Vannah) 23 June 1998, whole document.	1-10
A	US 5,824,105 A (Ries et al) 20 October 1998, whole document.	1-10
A	US 5,486,178 A (Hodge) 23 January 1996, whole document.	1-10
A	US 5,540,696 A (Booth, Jr. et al) 30 July 1996, whole document.	1-10

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"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5,928,286 A (Ashby et al) 27 July 1999, whole document.	3-5